

Berkeley and Jefferson Intelligencer.

[No. 9 of VOLUME VIII.]

FRIDAY, July 18, 1806.

[WHOLE No. 223.]

ATTENTION!!

THE Company commanded by the subscriber, are desired to attend a *MUSTER* to be held at Martinsburg on Saturday the 26th inst. at the usual time and place of parade. A punctual attendance is required from every individual belonging to the Company.

WILLIAM GREGORY.

July 11, 1806.

A List of Letters remaining in the Post-Office at Shepherd's-Town (Va.) on the first day of July, 1806; which, if not taken out by the first day of October next, will be sent to the general Post-Office as dead letters.

B. JOHN BATES, Cyrus Bildwin, Benjamin Boydstone, Rev. John Boggs, Moses or James Burr, William Bell, John Banks, sen.

C. William Crooke, John Clawson, Henry Callaghan, Thomas Cox.

D. John Downs, Nathaniel C. Dare, John Dicks.

F. Mary Faulk, Jacob Formalt.

G. Rees Gwillim.

H. James Hurst.

I. Rebecca Israel, John Johnathan, care of Mr. Crowl.

K. Peter Kit.

M. William Morgan, Messrs. M'Pherson & Brun, John Mark.

P. George Potter.

S. Captain Shepherd, George & Sidney Stipp.

T. Henry Talbutt, Thomas Toole.

W. John Williams, Thomas Wood, Joseph Ward, John Welsh, Mr. Windcop.

Y. James Young.

JAMES BROWN, P.M.

STRAYED or stolen from the subscriber, living in Shepherd's-Town, Jefferson County, Virginia, on the 8th day of May last, a *BLACK HORSE*, about 15 hands high, four years old, and has neither mark nor brand; he is a natural trotter; shod all round with old shoes, and one of his fore shoes was broke; he has a star in his forehead, and is a little ram-faced. If said horse is taken in this county, I will give five dollars, and all reasonable charges if delivered to me; and if he is taken up out of this county, I will give 8 dolls. for information so that I get him again, and if brought home to me, I will give the eight dollars and all reasonable charges. If said horse is stolen I will give twenty dollars for the horse and thief, if the thief is convicted, and all reasonable charges for bringing the thief to justice, paid by me; DENNIS STEVENS.

June 20, 1806.

For the INTELLIGENCER.

NO. 2.

WHEN nature forms a system, she, at the same time, establishes a law for its regular government. This law must be uniform in its operations; and the moment it ceases to be so, the system itself must cease to exist. The discovery of the circulation of the blood in animals, was the first, and indeed, the only important discovery yet made in medicine. This science must have been in a very deplorable condition prior to this discovery. But the law of health, to which this discovery might have led, has never been ascertained and understood; and it is impossible that the practical department of this science could be perfected without this knowledge. It was then and still is in a state of confusion. The ignorance of physicians, respecting the fever of Philadelphia, is proof of this assertion. They discovered that the fever of that city was highly inflammatory, as they express it, and that was the amount of their knowledge. If we compare the knowledge of physicians, with the knowledge of those who never read, nor never think, we shall find that physicians have greatly the advantage. But if we compare the knowledge of physicians with the subject of their pursuit, we shall find them as greatly deficient. To shew how little they understood of the nature of fever, and the power of medicine, the practice in the fever of Philadelphia is probation unquestionable. Vomiting, purging, and bleeding, are all excellent remedies; but

the law upon which health depends, must be understood, to know when they ought to be resorted to. The cause of fever has been as little understood, as the law of health, and the practice of physic is, alas! in the same predicament.

When Doctor Cullen speaks of the reaction of the system, if he means the reaction of the law established for the government of animation, the idea is futile, and was unworthy of a place in the mind of a professor of physic. If he does not mean a reaction of this law, he can mean nothing; and a reaction of this law cannot possibly take place without an immediate cessation of life. The spasm which he supposed formed upon the arterial extremities, as a necessary link in the chain of causes producing fever, is equally absurd, as the actual circulation at the time, is a proof of the futility of the idea.

The notion of the arterial system, as it is expressed, being under any circumstances of the body, convulsed, is of difficult estimation. There is no phenomena, incident to the human body, either in health or sickness, upon which, such an idea might, with the least propriety, or consistency, have been founded. The whole vascular system, must, forever, remain free from spasms or convulsions; and, can, of itself, never be the cause of fever. The apparent convulsion of the arterial section, if there is any such appearance, is an effect and not a cause. It is productive of nothing. When spasms or convulsions exist; in relation to the arterial section, they are to be considered as irregularities in the muscular action, which will, necessarily, produce irregularities in the efflux of the venous section; and, consequently, irregularities in pulsation. An irregular pulse, is a certain indication of irregular action, as the reaction, which proceeds from the heart, will correspond, and be in exact conformity, to it. To the existence of fever, it is requisite, that the action should be, not only complete; it must be entire, and increased. By this increased action, the efflux of the venous section will be increased both in quantity and rapidity; and the arterial section will be over-impelled. This is the condition of the vascular system in fever, and this is, in a lesser degree, the plethora of physicians.

There was nothing ever introduced into the systems of medicine, more absurd, than this notion of a plethora. It may be found in all medical writings, and even in that boasted performance of Doctor Brown. A plethora can exist only in the arterial section, and is a higher degree of animation than is compatible with health; and, if the influx should still continue to increase the action; this will increase the efflux; and a fever will be the consequence. The efflux and influx of the venous section governs all the phenomena of life. It is this that gives action and reaction to the muscular system. The action impels the fluids through the veins to the heart, and the reaction from the heart into the capillary veins, and the excretory section. A plethora of the whole vascular system never did, nor never can exist. It is just as absurd to suppose too much blood, as it is to suppose too much life; and because a fever exists to talk of a plethora. A plethora and fever is the same thing; differing only in degree. They both exist in the arterial section only; and both appear, and disappear, in every febrile paroxysm.

A tri-sectional division of the vascular system is necessary to the explanation of fever; and it is also necessary that the power ascribed to the heart and arteries should be blotted out from medical language. They are distinct in their structure; and are regulated in the transmission of their fluids, by distinct, and appropriate powers. Those powers I shall call the action and reaction of the muscular system, and the action I shall consider as the property upon which the vivific, and all the torpescent powers, exert their influence. All the powers, which are applicable to the fluids, or body, are either vivific or torpescent. They are all positive in their application, and direct in their action. A knowledge of those powers must depend upon experiment; and the effect produced upon inanimate matter, by their application, cannot, with any sort of propriety, be supposed, to lead to any judgment concerning them. Animation should be con-

sidered as a contingency depending upon artificial means, and that there is no power, inherent in the body itself, adequate to its perpetuation even for one moment. This is a truth that demands universal cognizance, and ought never to be forgotten. And it is a truth, of equal importance, that the application of the means to perpetuate life, can be perfected only by a knowledge of the law upon which animation depends. A regular impletion of the arterial section is the perpetual design of this law; and the highest degree of that impletion compatible with an exact parity between the efflux and influx of the venous section, is the highest degree of animation.

When we enter that dark recess, the womb, we may, by the aid of our reasoning powers, discover where life begins, the cause that sets it in motion, and the law by which the animating process is governed. The formation of the placenta leads us to the cause; and the venous delineations to the process. No nourishment can be derived to the embryo from the venous vessels, and it is not until after the fabrication of the heart, and the admission of an adequate efflux, that reaction, and development begins. The action, in the embryo, is produced by the placenta; but when, by the animating process, the lungs are completed, and the blood is copiously driven into them, there being no power to return it again to the heart, an uneasiness will be felt; and the fetus will involuntarily seek relief, like a man smothered would strive for open air; and this disturbance is the cause of parturition. Life now begins upon a new principle; though the operating power remains the same; and the action produced by the placenta, is transferred to the lungs. Force and propensity to motion are not the same, as asserted by Doctor Brown. There may be a propensity in the muscular system to motion, but a propelling power is necessary to produce it. The placenta performs this work during gestation, but parturition makes the transfer to the lungs. The aerial influx distends the thorax, returns the blood in the lungs to the heart, and completes the pulmonary circulation, which alone supports the general circulation, and gives action and reaction to the whole muscular system. This force is necessary to the existence of all animals, as it is notorious, that the general circulation if it is withheld; and that the pulmonary circulation is the last that yields to the morbid torpescent powers; and which proves the positions which I have assumed, that the efflux and influx of the venous section governs all the phenomena of life; and that the parity between the efflux and influx is the law of health. The pulse may be considered as properly enough representing the efflux, but it is by no means an infallible guide in the practice of physic. I shall, by and by, present a criterion, more enlightening, and certain, and which will not detain the physician in doubtful suspense concerning what ought to be done.

If we traverse the intermediate climates between the polar, and equatorial regions; we shall find a regular gradation in the violence of fever as we proceed. Whether heat is a diminution of cold, or cold a diminution of heat, is not material. They both exert a direct influence upon the body. We are taught by geographers, and natural historians, that man is capable of sustaining life in all the varied climates of the globe; and bids equal defiance to the snowy storms of the north and the flames of the torrid zone. All physicians, more or less, undertake to account for the existence of fever; and it will be admitted, that there has been and still is, a great diversity of opinion among them. Atmospheric heat, cold, moisture, and aridity, have all been employed in their service: *debility* and *vigour* also.

I had long been under the impression, that there must be some law pervading the animal body, and by which animation was regulated under all the circumstances and conditions of life, whether in low or elevated situations, in hot or cold climates, and that fevers were everywhere the same, differing only in violence; being generated and relieved in the same way. That there was such a law appeared to me unquestionable, and that it must be uniform in its operation

appeared equally so; and that during the existence of fever it must, in some manner be interrupted. The questions naturally followed, what is the nature of the law, and how is it interrupted? I read with avidity the huge volumes of physicians for an answer to these questions. I, however, found myself, by this step, plunged into a wilderness, without any trace to guide me to my object, and, therefore, abandoning this devious pursuit, I applied myself to a single subject then labouring under an *intermitting fever*. That he should be first chilled and then heated, and without any apparent cause to produce such effects, seemed altogether inexplicable. I endeavoured to apply the *spasm* and *reaction* of Cullen, as the cause, the morbid matter of others, and then the *debility* of Brown; but I found the doctrine of *debility* as far from the truth as, either *spasm* or *convulsion*. I then turned my attention to the vascular system expecting to find in the tracks of the fluids the nature of the law and the cause of the interruption. Taking the circulation for my guide, I began with the embryo, and throughout all the stages of animation found, that the circulation was forced, but by different powers in different parts. I found that debility was not a security against *peripneumony*, nor vigour against an *intermittent*. I also found that the arterial section was not well impleted during the chill, and that during the fever it was too much so. The fever invariably following the chill, suggested to me the idea that the fever was not the real disease, but was an effect of the real morbid state, and that it ought to be treated as an effect only. Pursuing this reflection I found that the morbid powers, when applied to the fluids, produced torpidity, but never emanated a fever. I found that the stimulus of fever was different from all the powers, whether morbid or not, and as none of those powers ever operated a direct emanation of fever, I concluded that the stimulus of fever must be generated in the body itself; and would be generated as often as the morbid torpescent powers were applied, with a force adequate to the production of a morbid torpidity. I made some experiments on myself, and found this position to be correct; and that the same power which produced the torpidity, if present, invariably corrected the fever. This idea led me into the wide field of medical speculation, and now I discovered that the torpescent powers alone were capable of producing the morbid state, and that the same power that produced it, or any other torpescent power, would correct the fever that followed; and that the stimulus of fever was infallibly generated in the body during the morbid or torpescent state of the fluids. This at once developed the principle upon which intermitting fevers depended; and, also, the principle upon which all fevers, whether *continued*, *remittent*, or *intermittent* existed, and shew me the reason of their existence; together with the remedies in each case, both natural and artificial, without a possibility of mistake.

The tendency of all the torpescent powers, is to produce torpidity, and they alone produce the morbid state; and this by effecting an inanition in the arterial section; and the tendency of all the vivific powers, is to produce activity in the fluids, and consequently arterial impletion, and a preservation of the law of health. By a proper application of the remedies this law may be preserved, which is the business of every man, but more especially of the physician. The existing state of society does not admit of all its members engaging in such pursuits; nor, can it, from a general view of mankind, be supposed, that it ever will. Therefore, a good physician, will always be a valuable acquisition to society. Having now the causes and remedies, of fever, within my power; I shall take the fever of 1804, on account of its recency, for the explanation both of cause and remedy. I shall aim at perspicuity, in order that I may be understood by all. But I must lament, that my circumstances are such, that I cannot attend to the subject as I would wish. But the science of medicine is not so mysterious, and inscrutable, as has been supposed. It will be found to be plain, but requiring the nicest judgment.

M. M. Cullen